

# **OCS Alternative Energy and Alternate Use**

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Minerals Management Service

**OCS Policy Committee Meeting**  
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# Energy Policy Act of 2005

Section 388 amended the OCS Lands Act and gave the Department of the Interior (DOI) new authority to regulate Federal OCS alternative energy and alternate uses

- DOI delegated the authority to MMS

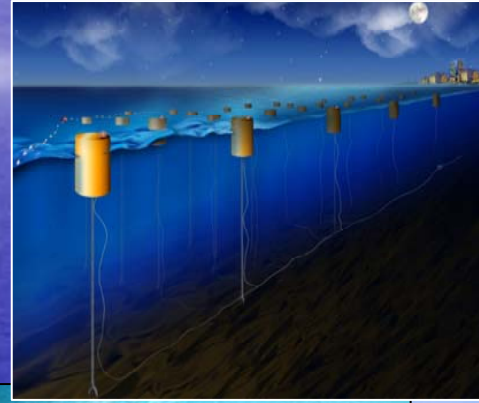


# **Section 388 of the EPA Act 05 Does Not:**

- Supersede or modify existing Federal authority
- Authorize any oil and gas activities in moratoria areas
- Apply to areas designated as National Marine Sanctuaries, National Parks, National Wildlife Refuges, or any National Monuments

# MMS Action Plan

- Manage existing OCS alternative energy projects
- Develop a regulatory program





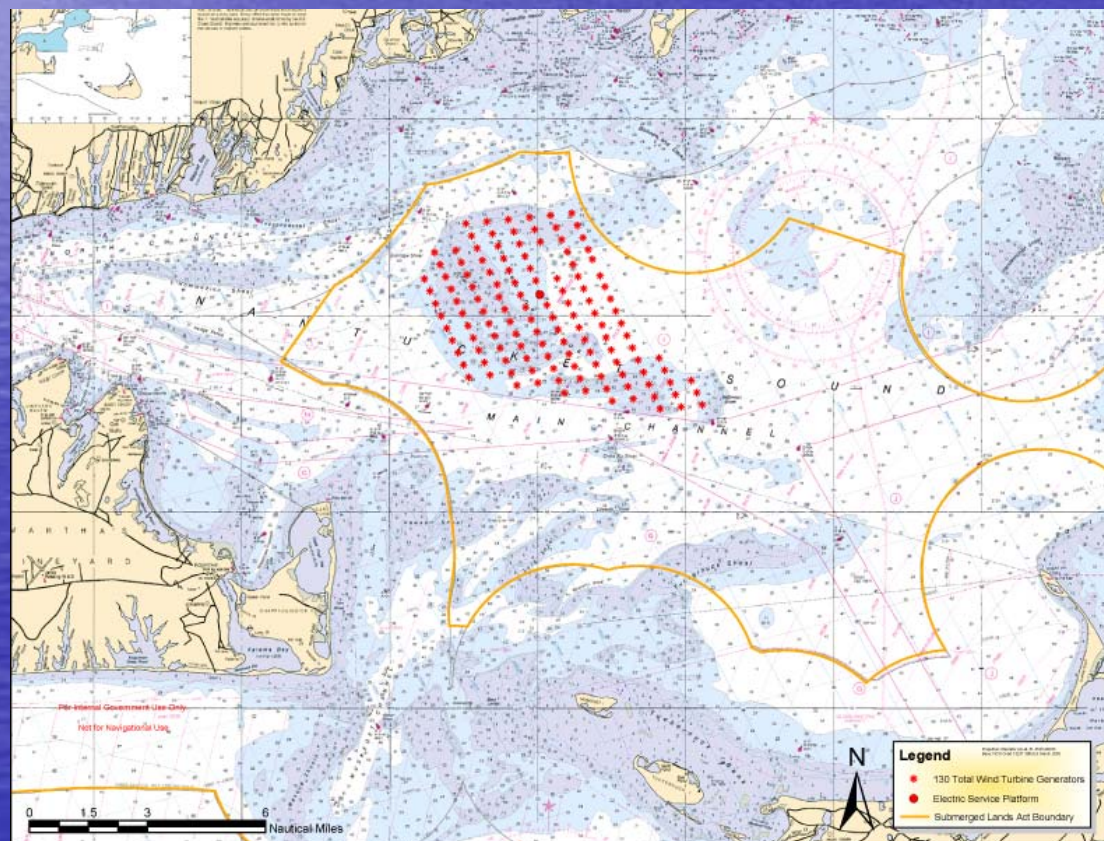
# **Manage Existing OCS Alternative Energy Projects**

- Cape Wind Energy Project
- Long Island Offshore Wind Park

**MMS will not issue decisions  
until Alternative Energy Program  
is in place**

# Cape Wind Energy Project (CW)

Cape Wind Associates, LLC, proposes to construct a wind park in Nantucket Sound, Massachusetts, about 4.7 miles offshore





# Cape Wind Energy Project

- Proposal consists of 130, 3.6 MW wind turbine generators
- CW project could produce up to 468 MW of electricity for distribution throughout the New England States
- EIS is evaluating the project's potential impacts from construction through decommissioning

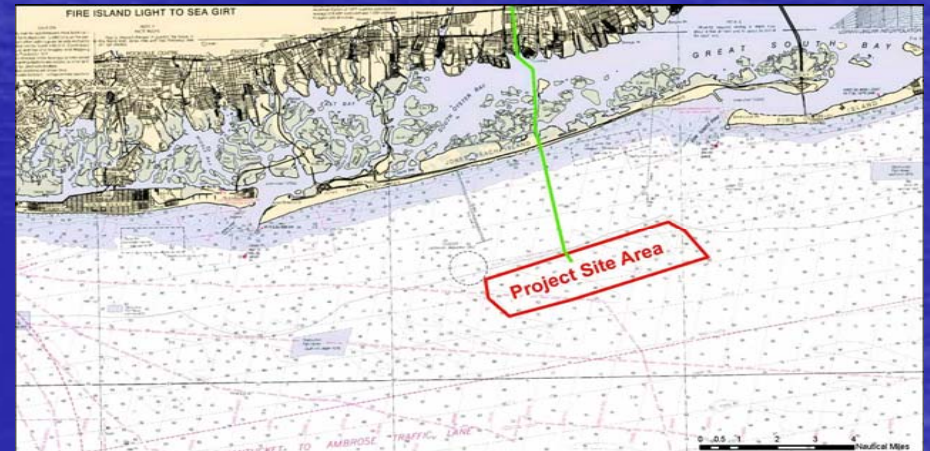
# Cape Wind Energy Project

- Draft EIS will consider a range of alternatives:
  - no action
  - phased build-out
  - smaller configuration
  - sites offshore RI, MA, and ME are analyzed for comparative purposes
- Targets:
  - Spring 2007      File draft EIS  
60-day comment period
  - Summer 2007    Hold public hearings



# Long Island Offshore Wind Park (LIOWP)

Long Island Power Authority and Florida Power and Light Energy propose to build offshore wind park about 4 miles off the south shore of Long Island, New York



# LIOWP Project

- The proposal entails installation of 40, 3.0 MW wind turbine generators
- LIOWP could produce 140 MW of electricity for local use on Long Island
- EIS is evaluating the project's potential impacts from construction through decommissioning



# LIOWP Project

- Draft EIS will consider a range of alternatives:
  - no action
  - one alternative site off of Long Island
  - one alternative site in deepwater
  - one alternative site onshore
- Targets
  - Fall/Winter 2007      File draft EIS  
60-day comment period
  - Winter 2008          Hold public hearings

# Developing a Framework

Program design premises:

- Enter into meaningful dialogue with stakeholders
- Create new regulatory process
- Focus on “regulator” role
- Use sound science, engineering, and environmental protection principles



# Stakeholder Meetings

- Held stakeholder meetings in Oregon, Massachusetts, New Jersey, and New York to share experiences and relevant knowledge associated with regional planning and siting energy facilities
  - *Identify stakeholders*
  - *Describe key issues and concerns*
  - *Characterize energy needs and trends*
  - *Describe current and future technology development*
  - *Identify State/Local regulations*

# Stakeholder: Issues & Concerns

- Industry losing momentum while MMS develops its regulations
- Nexus with State and local ocean planning initiatives
- Baseline environmental data acquisition may be difficult as well as expensive
- Technology testing or “non-grid” project will get caught up in complex permitting



# Stakeholder: Energy Needs & Trends

Increased interest into diversifying energy sources, including alternatives and renewables:

- Anticipated Pacific coast RPS: CA 33% by 2020; OR 25% by 2025; WA 15% by 2020
- Possible energy shortfalls forecasted for the Northeast
- New Jersey and Delaware are involved with the Regional Greenhouse Gas Initiative (RGGI) that caps CO2 emissions

# Stakeholder: State & Local Regulations

- State ocean planning initiatives are underway
- Interface with State regulators and public utilities commissions could be challenging due to disparate information requirements and regulatory deadlines
- States are interested in partnering to identify appropriate site(s) for OCS-based test facilities and to collect baseline data



# Stakeholder: Present & Future Technology

- Several ongoing efforts that focus on developing deepwater (up to 150 feet) wind energy facilities
- Options for storing surplus generated energy are being developed
- Northwest's focus is on developing ocean wave energy technologies
- Northeast's focus on wind energy technologies
- Increasing talk about OCS hydrogen

# Program & Regulatory Development

Two provisions under Section 388:

- Production, transportation, or transmission of energy from sources other than oil and gas  
[Alternative Energy]
- Use of currently or previously OCSLA-authorized facilities for energy-related purposes or for other authorized marine-related purposes  
[Alternate Use]



# Examples of Alternative Energy



Wind Energy

Wave Energy

Ocean Current  
Energy



Solar Energy

Hydrogen



# Examples of Alternate Use

- Aquaculture
- Research
- Education
- Recreation
- Offshore Operations Support
- Telecommunications

*(Only those alternate uses not otherwise authorized by OCSLA, Deepwater Port Act, the Ocean Thermal Energy Conversion Act or other applicable law.)*



# Competition Requirement

Secretary shall issue a lease, easement, or right-of-way on a competitive basis unless the Secretary determines after public notice of a proposed lease, easement, or right-of-way that there is not competitive interest.

# Key Considerations

- Safety
- Protection of the environment
- Coordination with affected State & local governments and Federal agencies
- Fair return for use of OCS lands
- Equitable sharing of revenue with States



# Major Regulatory Elements\*

- Lease Issuance  
Competitive & Noncompetitive  
Coordination
- Lease Administration  
Bonding & Payments
- Project Plan Reviews  
Site Assessment & Construction and Operations
- Conduct of Approved Plan Activities  
Installation, Production  
Environmental and Safety Monitoring & Inspections
- Decommissioning  
\*Includes compliance with Federal statutory requirements  
(e.g., NEPA, CZMA, ESA, MMPA, CWA, CAA etc.)

# Programmatic EIS/ Rulemaking Targets

## Spring 2007

- Publish draft Programmatic EIS  
[www.ocsenergy.anl.gov](http://www.ocsenergy.anl.gov)
- Hold public hearings
- Publish draft rule

## Summer 2007

- Open draft rule public comment period



# Programmatic EIS/ Rulemaking Targets

## Fall 2007

- File final Programmatic EIS
- Publish Record of Decision

## Winter 2007

- Publish Final Rule
- Hold Public Workshops

# Sound Science

## Develop Strategic Studies Plan

- Contracted with Research Planning, Inc. (RPI) to conduct a 9-month study entitled "The Worldwide Synthesis and Analysis of Existing Information Regarding Environmental Effects on Alternative Energy Uses of the Outer Continental Shelf"



# Worldwide Synthesis of Environmental Impacts - RPI

## Examines:

- Summary of Existing Literature
- Potential Impacts and Data Gaps
- Prioritizes Research Studies

## Focuses On:

- Physical Processes (tides, currents, waves)
- Benthic and Fish Resources
- Flying Animals (birds, bats, insects)
- Marine Mammals and Sea Turtles
- Aesthetics
- Space-Use Conflicts

# Worldwide Synthesis (Cont.)

- Greater availability of information on impacts from wind development than all others (wave, tidal, current)
- Studies of existing offshore wind parks are informative, but results may be difficult to transfer to U.S. settings
- Many studies use predictive assessments
- Strong need for long-term monitoring to provide empirical data



# Strategic Studies Plan

## April 2007—Final RPI Report

- Includes outside peer review
- Provides a solid foundation for workshop
- Identifies Subject Matter Experts (SME)

## Summer 2007—Workshop

- Attended by SME and MMS Scientific Advisory Committee
- Identify data gaps and study needs
- Develop appropriate methods and
- Suggest priorities for future studies

## Fall 2007—Final Strategic Studies Plan

- MMS Scientific Advisory Committee review/input

# **Marine Mapping Initiative**

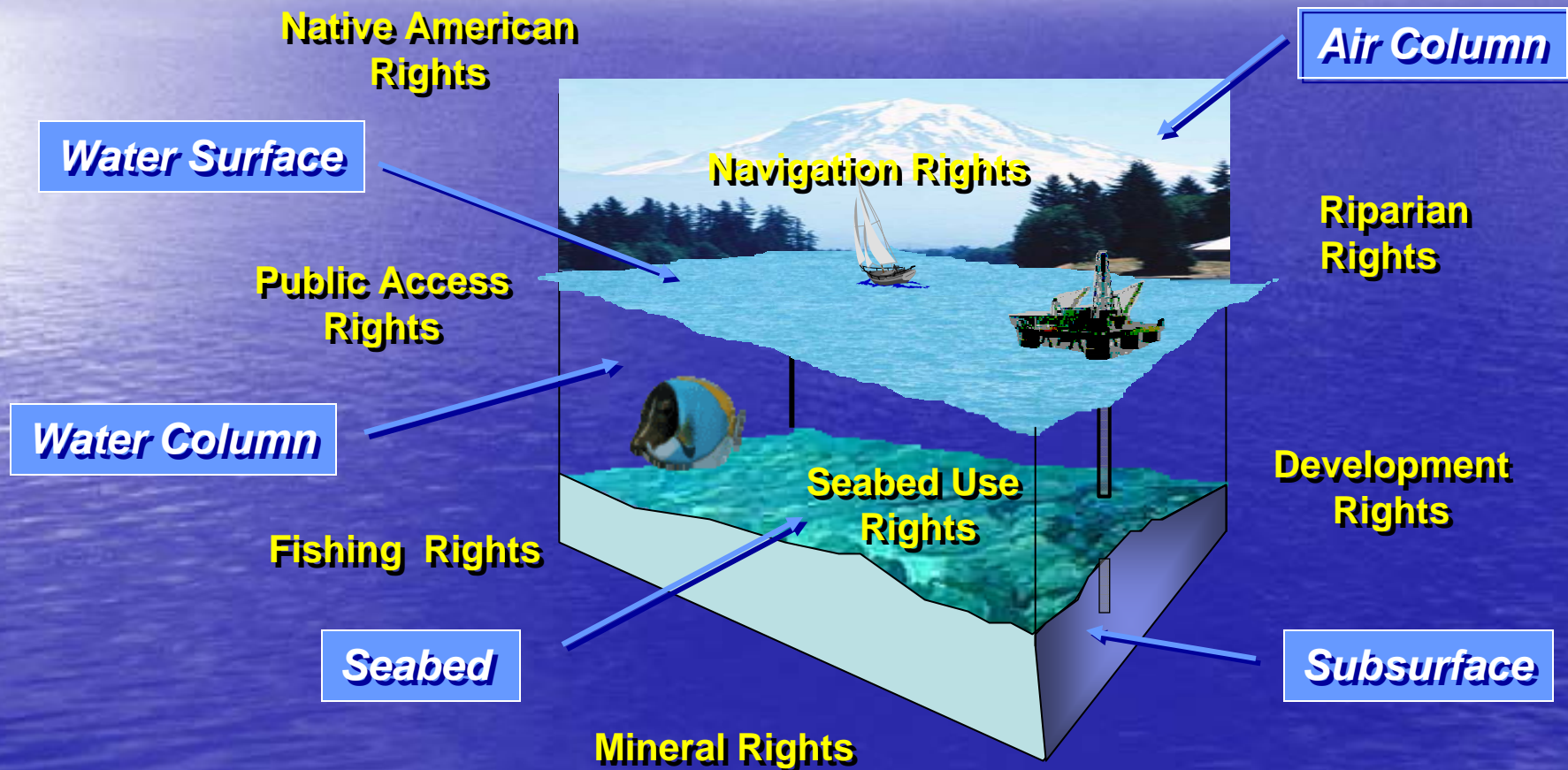
Section 388 mandated that DOI:

- Establish an interagency, comprehensive digital mapping initiative
- Use to assist in decision making relative to siting alternative energy activities



# What is a "Marine Cadastre"?

- Multiple and Often Overlapping Rights



# Marine Mapping Initiative

Marine Cadastre Working Group, associated with the Federal Geographic Data Committee (FGDC), was formed to accomplish this task

- FGDC
- Coast Guard
- U.S. Army Corps of Engineers
- National Marine Fisheries Service
- Florida Wildlife Fish and Wildlife Conservation Commission
- NOAA Coastal Services Center
- Federal Communications Commission



# Marine Mapping Initiative

Will identify:

- OCS locations of Federally-permitted activities;
- Obstructions to navigation;
- Submerged cultural resources;
- Undersea cables;
- Offshore aquaculture projects;
- Areas designated for the purpose of safety, national security, environmental protection, or conservation and management of living marine resources

# **Marine Mapping Initiative**

**Targeting FY08 to develop the  
online, interactive map depending  
on resource availability**



# Opportunities

- Opening the OCS to alternative energy possibilities
- Building partnerships with new stakeholders
- Expanding our offshore expertise and scientific knowledge
- Balancing multiple uses on the OCS
- Diversification of the Nation's domestic energy portfolio

# Questions?

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**[www.mms.gov/offshore/](http://www.mms.gov/offshore/)**

**[RenewableEnergy/RenewableEnergyMain.htm](http://www.mms.gov/offshore/RenewableEnergy/RenewableEnergyMain.htm)**